## Resource List Career Ladder and Pay for Performance

## Website Resources

Consortium for Policy Research in Education (CPRE)	http://cpre.wceruw.org/
Denver ProComp	http://denverprocomp.org/
Douglas County Colorado School District: Pay	http://www.dcsdk12.org/portal/page/portal/DCSD/Huma
for Performance Information	n_Resources/Certified_Staff/Pay_for_Performance
Houston Independent School District: Human Resources	http://www.houstonisd.org/portal/site/humanresources
Milken Foundation: Teacher Advancement	http://www.talentedteachers.org/tap.taf
Program (TAP)	
Minnesota Q Comp	http://education.state.mn.us/mde/Teacher_Support/QCom
	p/Program Components/index.html
Oregon School Board Association:	http://www.osba.org/lrelatns/perfpay/
Performance Pay Resources	
Springfield Massachusetts Public Schools	http://sps.springfield.ma.us/generalInfo/index.asp
Springfield Massachusetts Teacher Association	http://www.seateachers.com/

Consortium for Policy Research in Education (CPRE) Resources and Reports by CPRE Staff Members Some with an annotation

Chan, Y., Galarza, G., Llamas, S., Kellor, E., and Odden, A. (1999). A case study of the Vaughn Next Century Learning Center's school-based performance award program. Consortium for Policy Research in Education, Wisconsin Center for Education Research, University of Wisconsin-Madison. Available: <a href="http://www.wcer.wisc.edu/cpre/teachercomp">http://www.wcer.wisc.edu/cpre/teachercomp</a>.

Conley, S. and Odden, A. (1995). Linking teacher compensation to teacher career development. *Educational Evaluation and Policy Analysis*, 17(2): 219-237.

Describes career ladder programs in three districts: Flowing Wells, Arizona; Charlotte-Mecklenburg, North Carolina; and Pocatello Idaho. Also the Advanced Skills Teacher (AST) system in Australia is presented as an additional example. "Analyses of performance-based pay systems in education have diminished the expectations of scholars and policymakers that individual performance can (or should) serve as the primary basis for teacher compensation."

Denver's pay for performance plan. Consortium for Policy Research in Education, Wisconsin Center for Education Research, University of Wisconsin-Madison. Available: http://www.wcer.wisc.edu/cpre/teachercomp.

Heneman, H. and Milanowski, A. (2002) *CPRE research on teacher compensation and evaluation*. Presented at National Conference on Teacher Compensation and Evaluation. Chicago, IL.

Heneman, H.G. III. (1998). Assessment of the motivational reactions of teachers to a school-based performance award program. *Journal of Personnel Evaluation in Education*, 12: 43-59.

Study included 12 schools from the Charlotte-Mecklenburg School District, four each high, middle, and elementary. In each group two two-year bonus winners, one one-year bonus winner, and one nonwinner were included. Study focuses on motivations that teachers receive from school based

bonus programs.

Heneman, H.G. III. (1999). Teacher attitudes about teacher bonuses under school-based performance award programs. *Journal of Personnel Evaluation in Education*, 12(4): 327-341.

Focuses on teachers' attitudes toward the bonus portion of the program. "While the bonus system portion of the SBPA program does not replace, but only supplements, the single salary schedule for teachers, it represents a radical departure from the sole traditional means by which teachers have been compensated." Found that receiving a bonus was rated a very desirable outcome by teachers. "Gain attainment rewards" and "learning outcomes" were both rated highly by teachers. "It is clear that SMPA programs are much more than "just" a bonus program. They trigger and deliver multiple outcomes to teachers, some of which are desirable (including the bonus) and some of which are quite distasteful (sanctions)." Low support for the motivational potential of bonuses or desire to see them continue. Concludes that SBPA's have high motivational potential that pay go unrealized without careful planning, design, and administration of the program.

Heneman, H.G., Milanowski, A., & Kimball, S. (2007). Teacher performance pay: Synthesis of plans, research, and guidelines for practice. CPRE Policy Briefs, February 2007. Retrieved 2007 from: <a href="http://www.wcer.wisc.edu/cpre/publications/RB46%20FINAL%20FOR%20PRINT.pdf">http://www.wcer.wisc.edu/cpre/publications/RB46%20FINAL%20FOR%20PRINT.pdf</a>.

Overview of teacher performance pay plans. Provides a guideline for practice relevant for many types of teacher compensation innovations. Suggestions for success include stable and adequate funding, competitive total compensation package, reliable and valid measurement system, engagement of the teachers' association, and build capacity through research.

Johnson, A., Potter, P., Pughsley, J., Wallace, C., Kellor, E., and Odden, A. (1999). A case study of the Charlotte-Mecklenburg Public School's school-based performance award program. Consortium for Policy Research in Education, Wisconsin Center for Education Research, University of Wisconsin-Madison. Available: <a href="http://www.wcer.wisc.edu/cpre/teachercomp">http://www.wcer.wisc.edu/cpre/teachercomp</a>.

Johnson, H., Leak, El, Williamson, G., Kellor, E., Milanowski, T., Odden, A., and Hanna, J. (1999). A case study of the State of North Carolina's school-based performance award program. Consortium for Policy Research in Education, Wisconsin Center for Education Research, University of Wisconsin-Madison. Available: <a href="http://www.wcer.wisc.edu/cpre/teachercomp">http://www.wcer.wisc.edu/cpre/teachercomp</a>.

Kelley, C. (1999) The motivational impact of school-based performance awards. *Journal of Personnel Evaluation in Education*, 12(4), 309-326.

Studied Douglas Co., CO; Kentucky; Charlotte Macklenburg, NC; and Maryland Schools. Found that school-based performance award programs motivate changes in teaching practice by creating valued outcomes, encouraging clear goals, increasing collegiality, and aligning resources. Teachers reported that they spent more time on teaching and teaching-related tasks, changed the content of what they taught, and worked together with other teachers to plan and implement changes in what was taught. Negative effects included increased teacher stress.

Kelley, C. (2000). Douglas County Colorado performance pay plan. Consortium for Policy Research in Education, Wisconsin Center for Education Research, University of Wisconsin-Madison. Available: <a href="http://www.wcer.wisc.edu/cpre/teachercomp">http://www.wcer.wisc.edu/cpre/teachercomp</a>.

Kelley, C. and Protsik, J. (1997). Risk and reward: Perspectives on the implementation of Kentucky's school-based performance award program. *Educational Administration Quarterly*, 33(4), 474-505. Study centers on six award winning Kentucky schools, four elementary and two middle schools, in the Louisville-Frankfort-Lexington areas. Focus on employee motivation and compensation design.

Kelley, C., Odden, A., Milanowski, A., and Heneman, H. (2000). The motivational effects of school-based performance awards. Consortium for Policy Research in Education, University of Pennsylvania.

Kellor, E. and Odden, A. Cincinnati: A case study of the design of a school-based performance award program. Consortium for Policy Research in Education, Wisconsin Center for Education Research,

University of Wisconsin-Madison. Available: <a href="http://www.wcer.wisc.edu/cpre/teachercomp">http://www.wcer.wisc.edu/cpre/teachercomp</a>.

Kellor, E., Milanowski, T., and Odden, A. (2000). How Vaughn Next Century Learning Center developed a knowledge- and skill-pay plan. Consortium for Policy Research in Education, Wisconsin Center for Education Research, University of Wisconsin-Madison. Available: <a href="http://www.wcer.wisc.edu/cpre/teachercomp">http://www.wcer.wisc.edu/cpre/teachercomp</a>.

Kellor, E., Odden, A., and Conti, E. (1999). A case study of the Philadelphia Public School's school-based performance award program. Consortium for Policy Research in Education, Wisconsin Center for Education Research, University of Wisconsin-Madison. Available: http://www.wcer.wisc.edu/cpre/teachercomp.

Maryland school performance assessment program. Consortium for Policy Research in Education, Wisconsin Center for Education Research, University of Wisconsin-Madison. Available: <a href="http://www.wcer.wisc.edu/cpre/teachercomp">http://www.wcer.wisc.edu/cpre/teachercomp</a>.

Milanowski, A. (2003). The varieties of knowledge and skill-based pay design: A comparison of seven new pay systems for K-12 teachers. CPRE Research Report Series. (ERIC Document Reproduction Service No. ED477655)

This report examines pay systems for teachers, focusing on knowledge and skill-based systems. Descriptions and comparisons are based on the programs' operation or design in the 1999-2000 school year. Data were gathered from interviews with administrators, union officials, and teachers; onsite visits; documents describing programs; and research done by districts to evaluate programs. The similarities and differences among the seven programs are structured according to seven comparison dimensions: (1) motivation for developing the knowledge and skill-based pay program; (2) process used to design the program; (3) knowledge and skills rewarded and their organization into a structure; (4) how knowledge and skill acquisition was assessed; (5) size and structure of knowledge and skill incentives; (6) how the acquisition of the knowledge and skills is supported; and (7) additional costs of the program and methods of funding. Findings show that few programs had developed a coordinated professional development program specifically linked to the knowledge and skills rewarded in the new system.

Milanowski, A.T. (1999). Measurement error or meaningful change? The consistency of school achievement in two school-based performance award programs. *Journal of Personnel Evaluation in Education*, 12(4): 343-363.

Milanowski's (1999) study investigated the consistency of the performance classification of schools engaged in TBVP in Kentucky and Charlotte-Mecklenburg, North Carolina. Systems using "alternative" methods of assessment such as student portfolios and open-ended responses were more likely to have problems with measurement error than those based on standardized tests. Crosscohort comparisons also introduced another potential source of measurement error. Population changes may introduce measurement error as well.

Discusses motivation theories of expectancy and goal setting. Bandura's social cognitive theory is also discussed including the importance of the reliability of past performance measures in influencing motivation. "Perceived self-efficacy is influenced by past performance."

Odden, A. & Wallace, M. (2004). Experimenting with teacher compensation: Innovations piloted in districts include skills-based salary schedules, school performance awards and incentives for tougher assignments. *School Administrator*, 61(9), 24.

Improving teacher quality means ensuring that: (1) All teachers have sufficient knowledge, skills and instructional skills to boost student learning; (2) Shortages in key subject areas (mathematics, science, technology) and hard-to-staff schools (high poverty, low performing and geographically isolated) are eliminated; and (3) School systems do a better job of recruiting, developing, placing and retaining their teacher work force.

Odden, A. (2002). *New directions in teacher evaluation and compensation*. Presented at National Conference on Teacher Compensation and Evaluation. Chicago, IL.

Odden, A. and Kelley, C. (1997). Paying teachers for what they know and do: New and smarter compensation strategies to improve schools. (ERIC Document Reproduction Service No. ED404312)

Odden. A. (2007) Redesigning school finance systems: Lessons from CPRE research. CPRE Policy Briefs. RB-50. (ERIC Document Reproduction Service No. ED498361)

CPRE researchers believe they have succeeded in linking school finance equity and adequacy, both by aligning effective allocation and use of resources to the most powerful and comprehensive school-based strategies to boost student learning and by identifying strategies for how and how much to pay teachers. This summary of CPRE school finance research and its policy conclusions addresses the following topics: (1) How education dollars are spent; (2) Tracking education resources at the school level and by educational strategy; (3) Education resource reallocation; (4) Toward school finance adequacy; (5) Using resources to double student achievement; (6) Use of dollars after a school finance reform; (7) Pricing adequacy recommendations and enhancing teacher compensation; and (8) Policy and practice implications.

Schwedel, A., Veysey, P., Conti, E., Kellor, E. and Odden, A. (2000). A case study of the Boston Public Schools School Improvement Awards. Consortium for Policy Research in Education, Wisconsin Center for Education Research, University of Wisconsin-Madison. Available: http://www.wcer.wisc.edu/cpre/teachercomp.

The Colonial School District's Achievement Award Programs. Consortium for Policy Research in Education, Wisconsin Center for Education Research, University of Wisconsin-Madison. Available: <a href="http://www.wcer.wisc.edu/cpre/teachercomp">http://www.wcer.wisc.edu/cpre/teachercomp</a>.

White, B.R. (2002). *Performance-based teacher compensation in Iowa*. Consortium for Policy Research in Education, Wisconsin Center for Education Research, University of Wisconsin-Madison.

White, B.R., Heneman, H.G. (2002). A case study of proposition 301 and performance-based pay in Arizona. Consortium for Policy Research in Education, Wisconsin Center for Education Research, University of Wisconsin-Madison. Retrieved 2007 from:

 $\underline{http://www.wcer.wisc.edu/cpre/papers/Arizona\%20KSBP-SBPA\%202-02.pdf}$ 

An early implementation study of Arizona's Proposition 301. Arizona's approach to performance pay in the early part of this century allowed for primary local control.

Willis, T., Koch, K., Lampe, G., Young, R., Kellor, E., and Odden, A. (1999). A case study of the state of Kentucky's school-based performance award program. Consortium for Policy Research in Education, Wisconsin Center for Education Research, University of Wisconsin-Madison. Available: <a href="http://www.wcer.wisc.edu/cpre/teachercomp">http://www.wcer.wisc.edu/cpre/teachercomp</a>.

Additional Resources: Some Annotated and Some Not

(2002) Knowledge and skill based pay in Wisconsin: Greendale school district. Presented at National Conference on Teacher Compensation and Evaluation. Chicago, IL.

(2002) Performance pay in Arizona. Marana Unified School District, Tucson, AZ.

(2002). Performance-based pay in Arizona: Local plans for local needs. Arizona Education Association.

(2003). *Milken Family Foundation Teacher Advancement Program*. Milken Family Foundation. Retrieved 2003 from <a href="http://www.mff.org/tap/">http://www.mff.org/tap/</a>.

Archer, J. (2000). NEA delegates take hard line against pay for performance. *Education Week*, July 12. Discusses the vote by the NEA to continue their long-standing opposition to merit pay.

Azordegan, J., Byrnett, P., Campbell, K., Greenman, J., & Coulter, T. (2005). Diversifying teacher compensation. (ERIC Document Reproduction Service No. ED489329)

This issue paper builds on an earlier ECS publication that reviewed five leading pay-for-performance models or proposals at the time titled, Pay-for-Performance: Key Questions and Lessons from Five Current Models (2001). The Education Commission of the States and The Teaching Commission have joined together on this issue paper to provide: (1) An overview of the research on compensation systems that have ventured beyond the single salary schedule; (2) Some of the key findings about such a shift from both researchers and practitioners; (3) Key questions that have been gleaned from previous experiences; (4) An overview of some recent attempts to diversify teacher pay, both at the incremental and sweeping level; and (5) A comparison and detailed summaries of four leading programs and proposals at the district and school levels.

Bales, T.J. (2002). A study of teacher performance pay in Arizona: Perceptions of practicing administrators. (Doctoral dissertation, Northern Arizona University, 2002). Dissertation Abstracts International, 63, 02. (UMI No. 3080867).

Bonus model and campus/individual model. South Carolina teacher incentive program 1990-1991. (ERIC Document Reproduction Service No. ED334653)

Bratton, S.E. Jr., Horn, S.P., and Wright, S.P. (no date). Using and interpreting Tennessee's Value-Added Assessment System: A primer for teachers and principals. Available: http://www.shearonforschools.com/TVASS\_index.html.

Buckney, C.M. & Hall, S.B. (2002). *Enhanced compensation system: School district of Philadelphia*. Presented at National Conference on Teacher Compensation and Evaluation. Chicago, IL.

Burgess, S., Croxson, B., Gregg, P., and Propper, C. (2001). *The intricacies of the relationship between pay and performance for teachers: Do teachers respond to performance related pay schemes?* University of Bristol, Bristol, United Kingdom.

Discusses individual performance related pay (PFP) and team PFP schemes for teachers in the United Kingdom. Good discussion of advantages and drawbacks. Also has a summary of team-based pay in some United States schools and a review of the literature. Discusses the percentage of student achievement related to both school quality and teacher quality.

Camphire, G. (2001). Are our teachers good enough? *Sedletter*, 13. Available: http://www.sedl.org.pubs/sedletter/v13n02/1.html.

Center for Teaching Quality. (2006). Designing a system that students deserve. Retrieved 2007 from http://www.teachingquality.org/pdfs/TSreport.pdf

Chamberlin, R., Wragg, T. Haynes, G., & Wragg, C. (2002). Performance-related pay and the teaching profession: A review of the literature. *Research Papers in Education: Policy & Practice*, 17(1), 31-49. Reviews research on performance-based pay in England and Wales, examining: its effects on teacher behavior; its benefits and disadvantages; and performance-based pay in the United States, and noting studies of the conditions under which performance-based pay succeeds. The paper concludes that performance-based pay works best in situations that include easily measured outcomes.

Cincinnati, Ohio: Major accomplishments on the teaching quality agenda. Available <a href="http://tc.columbia.edu/nctaf/resourcedistrict/cincinnati.html">http://tc.columbia.edu/nctaf/resourcedistrict/cincinnati.html</a>.

Clotfelter, C.T. and Ladd, H.F. (1996). Recognizing and rewarding success in public schools. *In Holding schools accountable: Performance-based reform in education*, H.F. Ladd, ed, 23-63. Washington, D.C.: The Brookings Institution.

Cohen, D.K. (1996). Standards-based school reform: Policy, practice, and performance. In Holding

schools accountable: Performance-based reform in education, H.F. Ladd, ed, 23-63. Washington, D.C.: The Brookings Institution.

Community Training and Assistance Center. (2001). Pathway to results: Pay for performance in Denver. Boston, MA. Available: http://www.denver.k12.ca.us/pdf/PayForPerformance.pdf.

Cornett, L.M. & Gaines, G.F. (2002). Quality teaching: Can incentive policies make a difference? (ERIC Document Reproduction Service No. ED464085)

Southern Regional Education Board (SREB) states are implementing policies that provide incentives to attract and retain teachers and increase student performance. Every state has unique priorities. This report includes a framework for thinking about priorities for a state based on the SREB's teacher supply and demand research (reducing new teacher turnover, preparing teachers sufficiently, attracting teachers back into teaching, and keeping veteran teachers); examples of teacher incentive programs that are attracting and retaining teachers in SREB states (advanced certification, coaching and mentoring and shortage-area incentives); the history of pay-for-performance for teachers, with lessons from the 1980s and 1990s (e.g., teachers prefer pay for additional work rather than pay based on performance, evaluation of teachers must be perceived as fair, and district pilot programs rarely work in the performance pay area); and a review of school-level incentive programs that support state accountability programs (how states determine awards and funding and distribution of school incentives). Finally, the report discusses how states can ensure that every student has a quality teacher. Questions to help policymakers determine what is working and what is not working are included.

CPS, CFT kick off implementation of new teacher evaluation system. Available: <a href="http://www.cps-k12.org/general/TchngProf/tes.html">http://www.cps-k12.org/general/TchngProf/tes.html</a>.

Dee, T.S. & Keys, B.J. (2004) Does merit pay reward good teachers? Evidence from a randomized experiment. *Journal of Policy Analysis and Management*, 23, 471-488.

A common criticism of merit-pay plans is that they fail to systematically target rewards to the most effective teachers. This study presents new evidence on this issue by evaluating data from Tennessee's Career Ladder Evaluation System and the Project STAR class-size experiment. Because the students and teachers participating in the experiment were randomly assigned, inferences about the relative quality of teachers certified by the career ladder should be unbiased. The results indicate that Tennessee's career ladder had mixed success in rewarding teachers who increased student achievement. Assignment to career-ladder teachers increased mathematics scores by roughly 3 percentile points but generally had smaller and statistically insignificant effects on reading scores.

Eberts, R., Hollenbeck, K., & Stone, J. (2002). Teacher performance incentives and student outcomes. *Journal of Human Resources*, 37, 913-927.

Evidence from one high school using merit pay to reward student retention was compared to that from another with traditional compensation. Difference-in-differences analysis implied that merit pay increased retention but had unintended consequences: no effect on grade point average, reduced average daily attendance, and increased percentage of students who failed.

Education Commission of the States. (2001). Pay-for-performance: Key questions and lessons from five current models. Available: <a href="http://www.ecs.org/clearinghouse/28/30/2830.htm">http://www.ecs.org/clearinghouse/28/30/2830.htm</a>.

The goal of a pay-for-performance system is not just to reward teachers appropriately, but to motivate higher performance. Teachers need to have a clear understanding of their strengths, weaknesses, and opportunities to remedy their shortcomings. Availability of professional development aligned with the goals of the pay-for-performance system becomes particularly important.

Elmore, R.F., Abelmann, C.H., and Fuhrman, S.H. (1996). The new accountability in state education reform: From process to performance. *In Holding schools accountable: Performance-based reform in education*, H.F. Ladd, ed, 23-63. Washington, D.C.: The Brookings Institution.

Emrich, P.A. (2002). Successful determinants of pay for performance in an educational setting. (Doctoral

dissertation, University of Colorado at Denver, 2002). Dissertation Abstracts International, 63, 05. (UMI No. 3053608).

Firestone, W.A. and Pennell, J.R. (1993). Teacher commitment, working conditions, and differential incentive policies. *Review of Educational Research*, 63, 489-525.

Discusses seven key workplace conditions that contribute to teacher commitment: job design characteristics, feedback, autonomy, participation, collaboration, learning opportunities, and resources. Hints that collective incentives can enhance collaboration by redirecting competition from the individual to the school level, but states that there has been very little research on such programs.

Gallagher, H.A. (2002). *The relationship between measure of teacher quality and student achievement: The case of Vaughn Elementary (California).* (Doctoral dissertation, University of Wisconsin-Madison, 2002). Dissertation Abstracts International, 63, 07. (UMI No. 3060526).

Glazerman, S., Silva, T., Addy, N., Avellar, S., Max, J., McKie, A., Natzke, B., Puma, M., Wolf, P., and Greszler, R. (2006). Options for studying teacher pay reform using natural experiments. Mathematica Policy Research, Inc. (ERIC Document Reproduction Service No. ED498092)

This report presents findings and recommendations from a review of how secondary data could be used to study a variety of teacher incentive programs to address the question of whether teacher incentive programs improve student learning, either by making teachers more productive (productivity effort) or by attracting and retaining good teachers at higher rates (composition effect.) Following background information on attempts to study these programs, the preliminary steps of identifying and categorizing teacher incentive programs and the process of narrowing down the list to the most promising are discussed.

Goldhaber, D.D. & Eide, E.R.(2003) Teacher compensation and teacher quality. ERS Concerns in Education. (ERIC Document Reproduction Service No. ED481244)

Addresses the issues of the impact of teacher compensation and the factors that influence it from an economic perspective and includes examples of state and district efforts to use teacher compensation to attract and retain high-quality teachers. It uses the framework of the teacher labor market to address the predominant teacher compensation plan: the single-salary schedule. Chapter 7 explores some high-profile alternatives to the single-salary schedule. Chapter 8 presents education policy recommendations that local school district leaders could initiate in their districts.

Gordon, R., Kane, T.J., Staiger, D.O. (2006). Identifying effective teachers using performance on the job. The Hamilton Project Policy Brief No. 2006-01. (ERIC Document Reproduction Service No. ED495040) Their recommendations: reduce entry barriers; make it harder to award tenure to the least effective teachers; give bonuses to highly effective teachers willing to teach in disadvantaged schools; establish systems to measure teachers' job performance; and track student performance and teacher effectiveness over time.

Gratz, D.G. (2005). Lessons from Denver: The pay for performance pilot. *Phi Delta Kappan*, 86, 568.

Denver's Pay for Performance pilot, from which the new contract plan emerged, was jointly run by the district and the teacher association, supported by the business and philanthropic communities, seriously implemented (though not without problems), and thoughtfully reviewed. It forced significant improvements in the way the district does business--improvements demonstrated both in aggregate student achievement and in the opinions of participants--and led to the formation of a joint task force to develop a new plan for teacher compensation. The recently accepted plan is not a test-driven pay for performance plan, based on the experience of the pilot. Instead, it takes into account both successful teaching and service to the school community, an approach that entails a much broader assessment of performance than was piloted. It addresses problems identified through the pilot as well as long-standing issues and concerns felt in Denver and many other communities.

Hajnal, V.J. and Dibski, D.J. (1993). Compensation management: Coherence between organization directions and teacher needs. *Journal of Educational Administration*, 31, 53-69.

Discussion of motivations. Compensation may be viewed from economic, political, sociological, and psychological perspectives. "Only when there is a fit between the policies and the goals of the school organization will the motivational benefits of salary be optimized."

Hess., F.M. & West, M.R. (2006). A better bargain: Overhauling teacher collective bargaining for the 21st century. (ERIC Document Reproduction Service No. ED498038)

The authors argue that at a time when disappointing student performance, stark achievement gaps, and an ever-"flattening" world call for retooling American schools for the 21st century, the most daunting impediments to doing so are the teacher collective bargaining agreements that regulate virtually all aspects of school district operations.

Hruz, T. (2001). Performance-based pay for teachers in Wisconsin: Options and opportunities. *Wisconsin Policy Research Institute Report*, 14(4).

Iannelli, P.A. (2002). *The impact of pay-for-performance award programs on school culture*. (Doctoral dissertation, Immaculata College, 2002). Dissertation Abstracts International, 63, 02. (UMI No. 3041987).

Ingvarson, L., Kleinhenz, E., & Wilkinson, J. (2007). Research on performance pay for teachers. (ERIC Document Reproduction Service No. ED496519)

Discusses published research about performance pay for teachers in Australian schools focused mainly on performance pay schemes designed to provide incentives for professional development and recognition of improved standards of teaching.

Jacob, B. & Lefgen, L. (2006). When principals rate teachers: The best--and the worst--stand out. *Education Next*, 2006(2), 58-64.

While principals can and do judge teachers' performance, however, there is little good evidence on the accuracy of their judgments. The research reported in this paper fills this gap. The authors found that principals in a western school district did a good job of assessing teachers' effectiveness. In fact, principals were quite good at identifying those teachers who produced the largest and smallest standardized achievement gains in their schools (the top and bottom 10-20 percent). They were less able to distinguish among teachers in the middle of this distribution (the middle 60-80 percent), suggesting that merit-pay programs that reward or sanction teachers should be based on evaluations by principals and should be focused on the highest- and lowest-performing teachers.

Jacobson, L. (2006). Teacher-pay incentives popular but unproven. *Education Week*, 26(5), 1. The author discusses different state proposals to offer more-competitive salaries for teachers.

Johnson, L. (2006). Developing the basis for advancing performance incentives to public school teachers in Jamaica. (ERIC Document Reproduction Service No. ED496102)

This study explored the bases for awarding incentive in a pay for performance system in Jamaica by surveying the perspectives of a representative sample of teachers in the system at the time.

Joint Task Force on Teacher Compensation. (2003). *Recognizing and rewarding teachers in the 21*<sup>st</sup> century. Revised draft. Denver Public Schools and Denver Classroom Teachers Association.

Jupp, B. & Scott, S. (2002). *The DPS/DCTA Pay for Performance Pilot*. Presented at National Conference on Teacher Compensation and Evaluation. Chicago, IL.

Jupp, B. (2005). The uniform salary schedule: A progressive leader proposes differential pay. *Education Next*, 2005(1), 10-12.

In this article, the author describes the Professional Compensation System for Teachers (ProComp), developed in Denver to take its teachers further down the road toward a new form of thinking about compensation.

Keller, B. (2005). Some Florida districts opting not to pay out performance bonuses. *Education Week*,

24(44), 1.

In the three years that the Pinellas County, Florida, district has offered its more than 7,800 teachers a performance bonus as mandated by the state, exactly two have qualified and taken home the money. To get a paycheck topped up by 5 percent, Pinellas teachers are required to have had a hand in helping students raise their test scores by 120 percent of the expected increases for their grades. The teachers must also be rated "outstanding" by their principals and demonstrate they have gone beyond the ordinary, through awards, credentials, and service. Though Pinellas County, which includes St. Petersburg, may be an extreme, districts around the state have fallen far short of what the Florida legislature envisioned when it required them to put up 5 percent of their teacher-salary budgets for performance pay, starting in 2003, according to F. Philip Handy, the chairman of the state board of education. The state mandate played out differently in the Hillsborough County district, which includes Tampa. There, school officials expect more than 700 of their 12,000-teacher corps to get bonuses for this past year, up from more than 500 the previous year and about 230 in 2002-03. State officials say they could withhold millions of dollars in aid from districts that refuse to go along with the new rules.

Keys, B.J. & Dee, T.S. (2005). Dollars and sense. *Education Next*, 2005(1), 60-67.

This article discusses what a Tennessee experiment tells about merit pay. Though the dramatic effects that teachers have on student achievement are indisputable, the exact ingredients of effective teaching are anything but settled. Questions about how to value experience, education, certification, and pedagogical skills---the big four of teacher inputs--have created one of the most highly contentious fields of inquiry in education, particularly since they have clear implications for the design of teacher compensation systems. Critics of merit pay argue that the falloff in such programs was due to the fundamental technical difficulties of accurately identifying effective teachers and rewarding good teaching practices. Proponents of performance-based pay insist that these experiments were too limited in scope and were destined to fail in the face of stiff opposition from teachers and unions. In this article, the authors present two Tennessee merit pay programs: (1) Project STAR (Student Teacher Achievement Ratio); and (2) Career Ladder Evaluation System.

Kingdon, G.G. & Teal, F. (2007). Does performance related pay for teachers improve student performance? Some Evidence from India. *Economics of Education Review*, 26(4), 473-486.

Data from a school survey in India is used to ask whether there is evidence for the payment of performance related pay and whether such pay structures do impact on student achievement. After controlling for student ability, parental background and the resources available, private schools get significantly better academic results by relating pay to achievement; government schools do not.

Koehler, W.F. (1996). A K-12 faculty salary-growth model that provides equitable strategic increments. *Journal of Personnel Evaluation in Education*, 10, 37-51.

Koehler states that faculty members in their early and middle-career have prevailing personal needs including the repayment of student loans, growing family needs, and other personal commitments including the need to repay student loans which make extrinsic rewards of teaching prime motivators. After personal needs are satisfied, intrinsic rewards and status-recognition rewards become the prime motivators of most faculty members.

Koen, D. Alternative methods of staff development and teacher compensation. Colorado Springs Education Association. Available: <a href="http://www.nea.org/newunion/colorado.html">http://www.nea.org/newunion/colorado.html</a>.

Koppich, J.E. (2005). All teachers are not the same: A multiple approach to teacher compensation. *Education Next*, 2005(1), 13-15.

The author states that the time has come for school districts and teacher unions to take a different tack. It is time to develop and implement a professional compensation arrangement that recognizes the complex nature of the work of teaching and that compensates teachers for both the difficulty of the assignment and the professional accomplishment that is part of it. They need a compensation structure that utilizes multiple approaches. These should include paying teachers more for: (1) attaining knowledge and skills that demonstrably contribute to improving student learning; (2) mentoring newer and less skilled teachers; (3) teaching in hard-to-staff schools and choosing

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difficult-to-staff subjects; and (4) producing higher test scores, using a value-added approach.

Kotterman, P. (2002). *Arizona's performance based compensation*. Arizona Education Association. Presented at National Conference on Teacher Compensation and Evaluation. Chicago, IL.

Ladd, H.F. (2001). School-based educational accountability systems: The promise and the pitfalls. *National Tax Journal*, 54, 385-400.

Lieberman, J.M. (2002). The future of teacher compensation: Linking salary to National Board Certification. (ERIC Document Reproduction Service No. ED479808)

Actions being taken by an increasing number of states and districts to financially reward teachers who have become certified by the National Board of Professional Teaching Standards (NBPTS) are delineated and analyzed in terms of their advantages and disadvantages for reinventing teacher-compensation systems and policy implications are offered. However, national board certification is still too new and the number of nationally certified teachers too small to conclusively determine if it is improving teaching and learning.

Linn, R. L. (1999). *Assessment and accountability systems*. Presentation to the American Association of School Administrators National Conference, February 21.

Nine suggestions for accountability:

- 1. Develop standards, then assessments.
- 2. Track progress against standards as well as for broad areas such as mathematics.
- 3. Set standards that are high, but obtainable.
- 4. Track progress for subgroups of students as well as the total group.
- 5. Include all students in testing except those with the most severe disabilities.
- 6. Place more emphasis on comparisons of performance from year to year than from school to school.
- 7. Evaluate both the intended positive effects and the unintended negative effects of the assessment and accountability system.
- 8. Use multiple measures to make important decisions.
- 9. Provide the resources and professional development to teachers required for students to meet the high expectations.

Lugo, S. B. (2002). A time series quasi-experimental study of the effects of a pay for performance plan on teacher absences. (Doctoral dissertation, Arizona State University, 2002). Dissertation Abstracts International, 63, 11. (UMI No. 3069827).

Maloy, J. A. Jr. (2002). *The effectiveness of pay-for-performance plans with administrators: A qualitative study of two Illinois school districts*. (Doctoral dissertation, Indiana University, 2002). Dissertation Abstracts International, 63, 04. (UMI No. 3049601).

Management by results model, extended evaluation model, combination model. South Carolina principal incentive program 1990-1991. ED 334654.

Manzo, K.K. (1997). North Carolina consensus pushes for new set of reforms. *EdWeek*. 9 April. Available: <a href="http://www.edwweek.org">http://www.edwweek.org</a>.

Manzo, K.K. (1998). How to gauge accountability proving ticklish for North Carolina. *EdWeek*. 4 November. Available: <a href="http://www.edwweek.org">http://www.edwweek.org</a>.

McCabe, M. (2005). Weighing the merits. Several states are implementing pay-for-performance plans. *Teacher Magazine*, 16(5), 22.

The author introduces several states that implement pay-for-performance plans including Arizona, Delaware, Florida, Iowa, Minnesota, and New Mexico who have launched their own performance-based systems that compensate teachers for demonstrating specific knowledge and skills in the classroom.

Last Updated: October 24, 2007

McCaffrey, D.F., Lockwood, J.R., Koretz, D.M., & Hamilton, L.S. (2003). Evaluating value-added models for teacher accountability. New York: RAND Education. Retrieved 2007 from: http://www.rand.org/pubs/monographs/2004/RAND MG158.pdf

While value-added models (VAM) hold promise, they also raise many fundamental and complex issues. If these issues are not adequately addressed, VAM is likely to misjudge the effectiveness of teachers and schools and could produce incorrect generalizations about their characteristics. This article is technical at times, but that understanding is one of the concerns about VAM.

Menro, R.L. (1998). Student achievement and school and teacher accountability. *Journal of Personnel Evaluation in Education*, 12(3): 257-267.

Menro (1998) refutes the claims that teachers can be held accountable only for their own performance and not for the performance of their students. States that effective schools have (a) achievement as their major focus, (b) expect students to achieve, and (c) have principals who do not tolerate ineffective teachers. Menro (1998) suggests a differentiated staff development policy to allow the effective teacher more freedom to pursue individual interests and requires the ineffective teacher to target particularly ineffective practices.

Mohrman, A.M., Mohrman, S. A., and Odden, A. R. (1996). Aligning teacher compensation with systemic school reform: skill-based pay and group-based performance rewards. *Educational evaluation and policy analysis*, 18, 51-71.

Systemic school reform has these strategic elements:

- 1. A focus on school performance and student outcomes.
- 2. A focus on new curricula and the professional skills that they require.
- 3. A restructuring of the way schools are managed and organized.

Morice, L. C. & Murray, J. E. (2003). Compensation and teacher retention: A success story. *Educational Leadership*, 60(8), 40-43.

Describes components of successful teacher-evaluation and compensation program at the Ladue School District in suburban St. Louis, Missouri. Reports that salary increases based on performance evaluations improve teacher satisfaction and retention.

Morris, N.J. (2002). *Pay for performance in select Georgia middle schools*. (Doctoral dissertation, University of Georgia, 2002). Dissertation Abstracts International, 63, 11.

Murray, J.E. & Brown, K.S. (2003). Paying Teachers for Their Worth: Policies on Teacher Compensation at the School District and Regional Levels. (ERIC Document Reproduction Service No. ED482348)

This study reviewed the historical development of the teacher-compensation paradigm, discussed the current trends in alternative compensation policy strategies, and examined the teacher-compensation policies and practices in one state. The study was a mixed-methods policy analysis that used multiple linear regression, cluster analysis, and interpretative interviews to examine how 24 local school districts in a major metropolitan area of a Midwestern state develop and implement teacher-compensation policies. A significant relationship was found between the percentage of district revenue received from the state and the ratio of actual classroom teachers to students and the districts beginning teacher salary and maximum teacher salary.

Osborne, D. (2001). Paying for results. Govexec.com, February 1. Available: <a href="http://www.govexec.com/.../index.cfm?mode=report&articleid=19222&printerfriendlyVers=1">http://www.govexec.com/.../index.cfm?mode=report&articleid=19222&printerfriendlyVers=1</a>.

Discusses merit pay in government agencies. Suggests 10 lessons to keep in mind:

- 1. Use financial rewards, but don't underestimate the power of nonfinancial rewards
- 2. Magnify the power of incentives by applying them to groups as well as individuals. Team based rewards are most effective if the teams have real control over their work.
- 3. Use lump-sum performance bonuses.
- 4. Make bonuses big enough to get people's attention
- 5. Avoid arbitrary targets
- 6. Create winners, not losers
- 7. Involve employees I negotiating performance goals

- 8. Don't make reward formulas too complex
- 9. Develop a continuum of negative consequences. Stay away from financial penalties for poor performance except at the very highest levels.
- 10. Create a culture of learning, not fear

Raham, H. (2000). Cooperative performance incentive plans. *Peabody Journal of Education*, 75, 142-158.

Sanders, W.L. and Horn, S. P. (1998). Research findings from the Tennessee value-added assessment system (TVAAS) database: Implications for educational evaluation and research. *Journal of Personnel Evaluation in Education*, 12(3), 247-256.

Sanders and Horn suggest that individual teacher effects are the strongest predictors of student achievement gains followed by the student's prior achievement level, and the school system effects. States that "teacher effects on student achievement have been found to be both additive and cumulative with little evidence that subsequent effect teachers can offset the effects of ineffective ones." Sanders and Horn also note that race, socioeconomic level, class size, and classroom heterogeneity are poor predictors of student academic growth.

Sanders, W.L. and Rivers, J.C. (1996). Cumulative and residual effects of teachers on future student academic achievement. Knoxville, TN: University of Tennessee Value-Added Research and Assessment Center.

Schalock, M.D. (1998). Accountability, student learning, and the preparation and licensure of teachers: Oregon's teacher work sample methodology. *Journal of Personnel Evaluation in Education*, 12(3): 269-285.

"The aim of any accountability system should be to develop personal, professional responsibility rather than to develop an external hammer for performance" (Schalock, 1998). Discusses the differences Teacher Work Sample Methodology (TWSM) has made at the individual teacher level and within the institution, state, and nation.

Silberman, T., Hui, T.K., & Sung, E. (2003). *State's test scores surge*. Newsobserver.com. Retrieved 2003 from <a href="http://www.newsobserver.com/front/story/2857792p-2636772c.html">http://www.newsobserver.com/front/story/2857792p-2636772c.html</a>.

Solmon, L.C. & Podgursky, M. (2000). *The pros and cons of performance-based compensation*. Milliken Family Foundation. Retrieved 2007 from <a href="http://www.mff.org/pubs/Pros\_cons.pdf">http://www.mff.org/pubs/Pros\_cons.pdf</a>. The Pros and Cons of Performance-Based Compensation compiles and analyzes the current and historical criticisms of performance-based compensation in K-12 education. Lewis C. Solomon and Michael Podgursky believe that new compensation methods are not only feasible, but necessary in order to attract the best and the brightest into the teaching profession, keep the most effective of these in teaching, and motivate all teachers

Solmon, L.C. (2002). *Teacher Advancement Program*. Milliken Family Foundation. Presented at National Conference on Teacher Compensation and Evaluation. Chicago, IL.

Solmon, L.C. (2005) Recognizing differences. Education Next, 2005(1), 16-20.

The author states that teachers should be rewarded for producing useful student outcomes, most notably, student learning gains, measured by value-added standards (i.e., improvement) rather than by levels of achievement at the end of a course. This method takes into account differences in where students start as well as differences in out-of-school factors that teachers cannot control. Looking at gains rather than levels of achievement also adjusts for the fear that performance pay will make all

teachers want to teach the highest-achieving kids.

Spiller, L.D.P. (2002). *Pay for performance: A case study*. (Doctoral dissertation, Arizona State University, 2002). Dissertation Abstracts International, 63, 02. (UMI No. 3043833).

Stone, J.E. (2001). Value-added assessment: An accountability revolution. Thomas B. Fordham

Foundation. Available: <a href="http://www.edexcellence.net/better/tchrs/16.htm">http://www.edexcellence.net/better/tchrs/16.htm</a>.

Value-added requires the annual use of a valid and reliable achievement test in which the items used in each test cycle are fresh, non-redundant, and tied to an underlying scale. The forms used at each grade level must include a sufficiently wide range of items such that "ceiling" and "floor" effects are highly unlikely. Scores must be reported on a common scale that spans the range of grades for which the test is appropriate. A supporter of value-added assessment, he lists six advantages of using value-added assessment including that it (a) expresses teacher effectiveness in terms of increase over previous performance, (b) excludes preexisting differences among students, (c) can isolate achievement effects produced by an individual teacher, (d) can account for incomplete data, and (e) permits comparisons.

Sultanik, J. (2000). Bonus pay for teachers. *American School Board Journal*, February, 34-36. Colonial School District, Pennsylvania: teachers who improve student achievement far beyond expectations will be paid more – up to \$5000 more. As part of the evaluations, variables such as class size, students' previous test performance, and parents' education and socioeconomic levels will be taken into account.

Four beliefs of model of performance-based compensation:

- 1. Public school compensation systems can be modeled after those in the private sector.
- 2. Tenured teachers working under traditional systems that use longevity and educational attainment as measures for pay hikes to little to improve classroom performance.
- 3. Truly outstanding teachers should be paid more than poor or mediocre teachers.
- 4. Students achievement will improve if teachers have tangible incentive to improve their teaching. Teachers in the Colonial School District in Pennsylvania reported pressure from some teachers and union leaders to any teacher receiving an award to donate it to a charitable institution. The message was clear that they do not deserve the money even though they earned it.

Viadero, D. (2007). New center asks: Does merit pay work? *Education Week*, 26(1), 1.

With a five-year, \$10 million grant from the U.S. Department of Education's Institute of Education Sciences, the newly established National Center on Performance Incentives has put together an ambitious agenda to study teacher pay initiatives in Nashville, Tennessee, across the state of Texas, and in two other locations yet to be named. In the end, the center's researchers hope to shed light on whether teachers behave differently with the prospect of bonuses, whether student achievement improves as a result, and whether the existence of such programs will ultimately attract a different mix of teachers into the field.

Walsh, J. (2003). *Pawlenty pitches paying "super teachers" up to \$100,000*. Star Tribune. Retrieved 2003 from <a href="http://www.startribune.com/viewers/story.php?template=print-a&story=4129828">http://www.startribune.com/viewers/story.php?template=print-a&story=4129828</a>.

Walsh, M. (1994). Third version reinvigorates pact in Boston. Education Week, January.

Young, I.P. (2003). The trouble with pay for performance. *American School Board Journal*, 190(1), 40-42.

Structured interviews with 575 administrators and supervisors in 6 school districts finds 8 impediments to school board implementation of an effective merit pay system for employees: Lack of knowledge, teacher heritage, supervisor's ability, supervisor's motivation, managerial prerogatives, amount of rewards, and type of rewards. Offers suggestions for overcoming some of these obstacles.

Zhang, X. (2002). *Exploring the impact and process of merit pay for public school teachers*. (Doctoral dissertation, American University, 2002). Dissertation Abstracts International, 63, 03. (UMI No. 3048291).